



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

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Secretary of Natural Resources

David K. Paylor
Director

Jeffery Steers
Regional Director

June 8, 2017

Paula A. Hamel
Director, Generation Environmental Services
Dominion Virginia Power
Chesterfield Power Station

Transmitted electronically: paula.a.hamel@dom.com

Re: VA0004146 – Chesterfield Power Station – Outfall 301 PCB Sampling Protocol

Ms. Hamel:

Thank you for submitting the Outfall 301 PCB Sampling Protocol in accordance with Part I.C.10 of VPDES Permit VA0004146 which became effective on October 1, 2016. The Department of Environmental Quality has reviewed and hereby approves the plan.

This approval is your authorization to begin sampling following the commencement of discharge from internal Outfall 301. See Section I.C.10.d and e of the Permit for data reporting requirements and Pollutant Minimization Plan requirements, if applicable. This approval also does not relieve the owner from meeting all other laws and regulations as may be applicable.

Please contact Joseph Bryan at (804) 527-5014 or via email at Joseph.Bryan@deq.virginia.gov if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Emilee C. Adamson".

Emilee C. Adamson
Planning and Water Permit Manager

Enclosure: Approval Memorandum

cc: Kenneth Roller – Dominion
Anna Reh-Gingerich – DEQ

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY *Piedmont Regional Office*

4949-A Cox Road

Glen Allen, VA 23060

804/527-5020

SUBJECT: Outfall 301 PCB Sampling Protocol
VPDES Permit No. VA0004146 - Dominion Chesterfield Power Station

TO: Emilee Adamson, Planning and Water Permit Manager

FROM: Joseph Bryan, VPDES Permit Writer

DATE: June 8, 2017

COPIES: Paula A. Hamel - Dominion
Kenneth Roller - Dominion

Project Name: Outfall 301 PCB Sampling Protocol

Project Owner: Virginia Electric and Power Company d/b/a Dominion Virginia Power

Project Scope: The current VPDES permit for Dominion's Chesterfield Power station became effective on October 1, 2016. Condition I.C.10 of the permit requires that the facility conduct Low Level PCB Monitoring at Internal Outfall 301 for the purposes of the development or implementation of a PCB TMDL for the Lower James River. The permittee has submitted a PCB sampling protocol in accordance with Section I.C.10.a through c.

Staff Comments: The submitted sampling protocol follows the requirements of EPA Method 1668 and DEQ Guidance Memorandum 09-2001 (Appendix C). Staff has no objections to the Outfall 301 PCB Sampling Protocol and recommends that the plan be approved.

Approved:



Emilee C. Adamson
Planning and Water Permit Manager

Date: June 8, 2017

Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060
dom.com



BY U.S. MAIL
RETURN RECEIPT REQUESTED

January 10, 2017

Ms. Emilee Adamson
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060

**RE: Dominion-Chesterfield Power Station VPDES Permit No. VA0004146
Outfall 301 PCB Sampling Protocol**

Dear Ms. Adamson:

Based on the permit requirements of Part I.C.10 and the recommendations presented in VA DEQ Guidance Memorandum 09-2001, Dominion developed the attached Outfall 301 PCB Sampling Protocol for your review and approval.

Should you require additional information, please contact Oula Shehab-Dandan at (804) 273-2697 or via email oula.k.shehab-dandan@dom.com.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Paula A. Hamel
Director, Generation Environmental Services

Enclosure

**Chesterfield Power Station
PCB Sampling Protocol**

Sampling Overview

Location	Sample Type ⁽¹⁾	Volume	Flow Conditions	Number of Sampling Events per Outfall	Additional Monitoring
Outfall 301	Grab	2-4 Liters per sample	Wet Weather ⁽²⁾	Minimum of 2	Flow/volume of discharge; weather conditions

- (1) Manual and/or automated composite samples may also be used for Outfall 301 if determined appropriate. Composite sample collection will follow the method described in DEQ Guidance Memorandum 09-2001.
- (2) “Wet weather condition is defined as a wet event that exceeds 0.1 inch and results in an increase in wastewater flow, and that occurs at least 72 hours from the previously measured (> 0.1 inch) storm event. Adherence to the wet weather guideline may be problematic for reasons such as variation in facility retention time. Therefore, in determining the best time to collect samples, facility personnel may apply Best Professional Judgment (BPJ) as it relates to wet weather influencing the facility hydrograph (i.e., increase). A guideline to follow for wet weather sample collection coincides with a precipitation based event (>0.1 inch) where the influent flow increases by 10% or more from the base influent flow, and considers the retention time of the facility. BPJ can be supported with information such as facility retention time, plant hydrograph, local rain gage data, etc. during the sample collection period.

Additional samples, including but not limited to quality assurance analyses, may be collected and analyzed to establish background, atmospheric, or other potential sources of PCBs.

Sampling Guidelines

Dominion will obtain appropriate PCB-free sampling containers from the selected analytical laboratory.

The samples will be collected at the permit compliance monitoring point (Outfall 301). Disposable Nitrile gloves, or equivalent, will be utilized. Additionally, Dominion best practices and safety protocols will be employed in all sampling activities.

The samples will be collected directly into certified pre-cleaned glass bottles. Samples will be analyzed for congener-specific and total PCBs using the most recent analytical Method 1668.

Sampling Method*Sample Collection and Storage*

1. Remove the Teflon lined cap and temporarily place in aluminum foil.
2. If practical, submerge the certified pre-cleaned bottle. Other collection techniques may be used as needed. Use all necessary precautions to reduce contamination.
3. The final sample volume should be as close as possible to between 2 and 4 liters.
4. Upon collecting the sample(s), immediately place the cap back on the bottle(s), label and place on ice in a cooler and chill to $<6^{\circ}\text{C}$.
5. Complete field data sheets to document the sample event.
6. Place sample(s) in a darkened refrigerator capable of maintaining $<6^{\circ}\text{C}$. Samples may be stored up to one year.

Shipping Procedure

1. Once sampling has been completed, PCB samples will be packaged in bubble wrap to prevent breakage during shipping. The bottle caps may be sealed using Teflon tape if needed.
2. Coolers shall be packed with sufficient amounts of bagged wet ice to ensure the temperature is maintained at $<6^{\circ}\text{C}$ for shipment to the analytical laboratory.
3. Chain of custody forms will be completed and sealed in a waterproof bag (e.g., zip lock bag) to accompany all samples from the time of initial generation through delivery to the analytical laboratory.
4. The samples may be transferred to an appropriate shipping agent for conveyance to the PCB analytical laboratory for processing and analysis.